

# REGULAR OR HIGH OCTANE: TRUTH AND CON\$EQUENCES\$

**1.** Most cars are designed to run on regular gasoline and regular gasoline is all you need.

**2.** If you hear severe knocking while you drive, you should switch to a higher octane gasoline.

**3.** The octane number reflects the amount of energy or power in the gasoline. The higher the octane, the more power you get for your car.

**4.** If your car is running sluggishly, you should switch to a higher octane gasoline.

**5.** High octane gasoline contains better detergent additives and keeps your engine cleaner than regular gasoline.

**6.** Even if your owner's manual recommends regular gasoline, it is still a good idea to fill up with high octane every few tankfuls.

**7.** Most cars need higher octane as they age.

**8.** If you hear light knocking once in a while, you should switch to a higher octane gasoline.

**9.** Since high octane gasoline burns cleaner than regular gasoline, it is better for the environment.

**1. True:** While some of the more expensive car models require premium gasoline, for most cars the right octane is regular.

**2. True:** Severe engine knock, which is identified as a loud knocking or pinging sound in the engine, should not be ignored because it can cause engine damage. If switching to higher octane does not solve the problem, see your mechanic.

**3. False:** The octane number is simply the measure of the antiknock performance of a gasoline. Most cars only need regular (87) octane to resist engine knock. Some sports and luxury cars need higher octane (89 or 92) because they have high-compression engines. In general, higher octane gasoline will not increase your car's power or acceleration.

**4. False:** Unless your engine is knocking or pinging, you car won't benefit from higher octane.

**5. False:** As a rule, high octane gasoline does not outperform regular octane in cleaning engine deposits. In fact, the law requires that *all* octane grades of *all* brands of gasoline contain engine cleaning additives to protect against the build-up of harmful levels of engine deposits during the expected life of your car.

**6. False:** Using high octane every few tankfuls in a car that does not knock on regular gasoline provides no benefit to your car, and is simply a waste of money.

**7. False:** Most cars will run properly on the recommended octane throughout their lives. However, a small percentage of cars may develop engine knock, and will need higher octane.

**8. False:** Occasional light knocking or pinging won't harm your engine, and doesn't indicate a need for higher octane. In fact, light knocking is often an indication that your engine is performing at peak efficiency.

**9. False:** There is no scientific evidence that higher octane burns cleaner or pollutes less than regular. In fact, high octane gasoline consumes more energy to produce at the refinery and, in that sense, is worse for the environment.

# Manual-ease

The high price of gasoline doesn't have to bust your budget. Here's how to fuel better driving habits and make fewer trips to the pump:

1.

Check your owner's manual to find out what octane your engine needs, then buy it. Resist the urge to buy higher octane gas for "premium" performance. The AAA's experts say that about five percent of the cars sold in the United States require premium gasoline, yet premium gas accounts for 20 percent of all gasoline sold.

2.

Keep your tires inflated to the proper levels. Properly inflated tires provide less road-resistance and can improve fuel efficiency. Check your owner's manual for the guide to appropriate inflation levels.

3.

Keep your engine tuned. Make sure that you change the oil and get tune-ups according to your owner's manual.

## THINK

before you fill the

## TANK



Most gas stations offer three octane grades: regular (usually 87 octane), mid-grade (usually 89 octane) and premium (92 or 93).



Octane ratings measure a gasoline's ability to resist engine knock, a rattling or pinging sound that results from premature ignition of the compressed fuel-air mixture in one or more engine cylinders.



Premium gas costs 15 to 20 cents per gallon more than regular. That extra octane you may not need can add up to \$100 or more per year in extra costs.



As a rule, higher octane gasoline does not outperform regular octane in helping to prevent or remove engine deposits, or in cleaning your car's engine.

## RESOURCES

For more information on the accuracy of an octane label, write:

Consumer Response Center  
Federal Trade Commission  
Washington, DC 20580

For a complete list of all FTC consumer and business publications, ask for **Best Sellers**. You also may access FTC publications at [www.ftc.gov](http://www.ftc.gov) on the Internet.

The American Automobile Association  
Contact your local AAA office, or visit [www.aaa.com](http://www.aaa.com) on the internet.

Your state Attorney General  
Office of Consumer Protection



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# Saving



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